2018



Joint Technology Committee





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Joint Technology Committee

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December 2018

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LEGISLATIVE COUNCIL

ROOM 029 STATE CAPITOL DENVER, COLORADO 80203-1784

E-mail: lcs.ga@state.co.us

303-866-3521 FAX: 303-866-3855 TDD: 303-866-3472

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To Members of the Seventy-second General Assembly:

Submitted herewith is the 2018 Joint Technology Committee (JTC) final report. The purpose of the JTC final report is to provide annual and historical information on the information technology (IT) capital budget request process. The 2018 final report provides a complete summary of all IT capital construction appropriations during the 2018 session. The report concludes with a description of other actions taken by the JTC in 2018.

The JTC final report serves as a permanent record of IT capital funding. The report also serves as an informational document for any other entity or individual interested in the progress of IT capital development in the state of Colorado.

Respectfully submitted,

Natalie Mullis Director

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This report is also available online at:

http://leg.colorado.gov/node/1220416/

Committee Charge

Establishment and Procedural Matters

Membership. Pursuant to Section 2-3-1702, C.R.S., the Joint Technology Committee (JTC) is established consisting of the following, who shall have experience in the areas of information technology (IT), business analysis, or business process:

- three members of the House of Representatives, two of whom are appointed by the Speaker of the House and one of whom is appointed by the House Minority Leader; and
- three members of the Senate, two of whom are appointed by the Senate President and one of whom is appointed by the Senate Minority Leader.

"Information technology" is defined as information technology and computer-based equipment and related services designed for the storage, manipulation, and retrieval of data by electronic and mechanical means, or both. The term includes, but is not limited to:

- central processing units, servers for all functions, and equipment and systems supporting communications networks;
- all related services, including feasibility studies, systems design, software development, system
 testing, external off-site storage, and network services, whether provided by state employees or
 others;
- the systems, programs, routines, and processes used to employ and control the capabilities of data processing hardware, including operating systems, compilers, assemblers, utilities, library routines, maintenance routines, applications, application testing capabilities, storage system software, hand-held device operating systems, and computer networking programs; and
- the application of electronic information processing hardware, software, or telecommunications to support state government business processes.

It does not mean post-implementation support, hardware life-cycle replacement, or routine maintenance, unless such replacement or maintenance is part of a larger computer system upgrade.

Appointees to the JTC may be designated after the general election, but prior to the convening of the General Assembly. The appointees may be current members or members-elect. Prior to being sworn in, members-elect are to have the same powers and duties and be entitled to the same compensation and expense allowance as current members.

Chair and vice-chair. The committee is required to elect a chair and vice-chair, one from the House and one from the Senate. The chair and vice-chair serve in those roles for the first regular session of the General Assembly after they are so elected and switch roles for the second session.

Organization, procedures, and meetings. The committee is permitted to develop its own procedural rules. The JTC may meet as often as necessary to perform its functions, but it is required to meet at least once a year to review the Governor's budget submissions related to IT.

Powers and Duties

Oversight duties. The committee has oversight responsibility for the Governor's Office of Information Technology (OIT). "Oversee" is defined as reviews of major IT projects, reviews of the OIT's budget requests for IT projects, and ensuring that IT projects follow best practice standards as established by the OIT. Such oversight includes, but is not limited to:

- a review of the state of IT;
- any general IT needs;
- any anticipated short-or-long-term IT changes for OIT;
- OIT's responsibilities related to the statewide communications and information infrastructure;
- OIT's responsibilities for statewide geographic information system coordination.

Oversight does not include interference with the general responsibilities of OIT. State law directs OIT to assist the JTC as necessary to facilitate the committee's oversight of OIT. This includes a number of advisory duties and reporting requirements. Specifically, the JTC should receive regular reports from OIT concerning the following:

- any emergency acquisition or purchase of IT resources made in the preceding fiscal year;
- an accurate account of all activities related to the Public Communications Trust Fund; and
- annual updates to the statewide information technology plan.

Other JTC oversight responsibilities include:

- the state's Chief Information Security Officer and his or her duties;
- any telecommunications coordination in the state performed by the state's Chief Information Officer;
- the General Government Computer Center; and
- state agencies regarding:
 - any IT purchased or implemented that is not managed or approved through OIT;
 - any IT that a state agency purchased or implemented that does not follow the standards set by OIT; and
 - > any IT that a state agency purchased or implemented that has the same function as IT already created, purchased, or implemented by OIT.

The committee may also request information and presentations about data privacy and cybersecurity and coordinate with the Colorado Cybersecurity Council.

IT budget requests. An "IT budget request" means a budget request from a state agency or state institution of higher education for the installation, development, or upgrade of IT, including the purchase of services from OIT. It does not include budget requests that are primarily operational in nature or where the majority of funding will be used to support or modify state staffing levels.

Each fiscal year, the JTC is required to study and prioritize all IT budget requests made by state agencies and all state-funded IT budget requests made by state institutions of higher education. After hearing from state agencies, institutions of higher education, OIT, and other sources of information about the amount of revenue available, the committee is required to submit written reports to the Joint Budget Committee (JBC) setting forth its recommendations, prioritization, findings, and comments regarding each IT budget request submitted to the JTC.

Reports regarding supplemental IT budget requests are due no later than January 15 of each year, and new or amended requests for the upcoming fiscal year are due no later than February 15 of each year. The JBC may also choose to seek the JTC's review of any operating budget request for IT.

The JTC is required to forecast the state's needs for future IT budget requests in order to facilitate the planning and implementation of state IT projects.

Committee review. The committee is required to review any legislative measure that is determined by the Speaker or the President to deal with IT. The committee is authorized to make advisory recommendations about such measures to the full House and Senate, the JBC, the Capital Development Committee (CDC), and any committees of reference, as appropriate.

The committee may also request information and presentations regarding data privacy and cybersecurity within state agencies and the authority to coordinate with the Colorado cybersecurity council created in the Department of Public Safety.

Upon request of the JTC, executive branch agencies, the Judicial Department, and the departments of Law, State, and Treasury are required to make available to the committee any data, reports, or information necessary for the performance of the committee's duties. The information is to be provided by November 1 of the calendar year the request was made. Upon request of the General Assembly, the JTC, or the JBC, agencies are required to provide satisfactory evidence of compliance.

The Government Data Advisory Board is required to submit an annual report to the JTC on or before March 1 concerning the board's actions.

Additionally, the committee is authorized to review the actions of the Statewide Internet Portal Authority (SIPA). SIPA is required to submit a report to the JTC on or before November 1 of each year that sets forth a complete and detailed operating and financial statement of SIPA during the relevant fiscal year. The report must also include any recommendations for legislation or other action that may be necessary to carry out the functions of SIPA.

Reporting requirements. The JTC is required to submit an annual report on the committee's findings and recommendations to the JBC. The report may include:

- legislation recommended by the committee, which is exempt from the five-bill limit specified in Joint Rule 24;
- any recommendations based on the committee's statutory oversight; and
- the status of IT budget requests that were previously approved for phasing in or for incremental implementation over a period exceeding one year.

Executive branch agencies are encouraged to submit a written report on or before November 1 of each year to the JTC concerning IT matters that are not managed by OIT. The Judicial Department and the departments of Law, State, and Treasury are also encouraged to submit such a report on or before November 1 of each year.

Advisory board membership. If a vacancy arises for the legislative branch position on the Government Data Advisory Board, such vacancy must be filled by a member of the JTC.

Information security plan. Legislative service agency directors are required to maintain an information security plan and keep the JTC advised of the plan.

Staff assistance. Legislative Council Staff and the Office of Legislative Legal Services are required to assist the JTC in performance of its duties. This includes:

- acting as a liaison between state agencies and the committee;
- receiving and analyzing information and requests from state agencies for the committee's review;
- managing the committee's schedule for meetings and travel;
- providing background material and legal analysis about the matters before the committee;
- drafting bills recommended by the committee; and
- tracking and reporting on legislation and projects related to the committee's charge.

Legislative Council Staff is required to assist and advise the committee by reviewing and summarizing IT budget requests made by all state agencies and state institutions of higher education. Staff also arranges such hearings as necessary for the JTC to consider all IT budget requests.

Committee Activities

The committee met 13 times in 2018. This report highlights the committee's work regarding the FY 2018-19 IT capital budget. In addition, the committee discussed and was briefed on a broad range of IT-related issues by executive branch agencies and SIPA. Discussion and briefing topics included:

- FY 2018-19 IT capital budget requests;
- supplemental IT budget requests;
- Judicial Branch FY 2018-19 operating budget request;
- SIPA update;
- Office of the State Auditor (OSA) briefing;
- HRWorks project updates;
- OIT project oversight;
- blockchain technology;
- cybersecurity exeutive session;
- Interoperability project update;
- Colorado Benefits Management System Transformation project updates;
- tour of the Colorado Cable Telecommunications Association's Broadband Experience Center;
- DRIVES presentation;
- Trails modernization project update; and

• IT-related legislation.

The committee recommended one bill for consideration by the General Assembly. Senate Bill 18-209 passed the General Assembly and became effective on August 8, 2018.

IT Capital Budget Requests

The JTC's charge gives the committee oversight responsibility for approving IT capital budget requests. The committee discussed and was briefed by representatives from OIT; the Colorado Department of Education; the Colorado Department of Human Services; the Colorado Department of Public Health and Environment; the Colorado Department of Labor and Employment (CDLE); the Colorado Department of Natural Resources; the Governor's Office of eHealth Innovation; Lamar Community College; Otero Junior College; Pueblo Community College; Pikes Peak Community College; Community College of Denver; and Trinidad State Junior College. The committee prioritized six state-funded IT capital budget requests and two cash-funded (including federal funds spending authority) IT budget requests, for a total of \$17,537,760 Capital Construction Fund (CCF) and \$19,147,826 cash funds (CF), including federal funds, spending authority.

Table 1 provides more information about the eight IT capital budget requests for FY 2018-19 that were prioritized by the JTC in 2018, including the agency making the request, a project title, and the amount and type of funds requested (CCF or CF).

Table 1
Prioritized FY 2018-19 IT Capital Budget Requests Approved by the JTC

		JTC FY 2017-18
Department	Project Name	Requested Appropriation
	17.0	\$50,000 CCF
Human Services	IT System Interoperability	\$450,000 CF
Office of Information Technology/Personnel and Administration	Human Resources Information System	\$7,414,260 CCF
Office of Information Technology	Strategic IT Infrastructure Needs	\$5,122,000 CCF
Education	Information Management System Updates	\$2,331,000 CCF
Public Health and	Electronic Birth Registration System	\$745,000 CCF
Environment	Replacement	\$1,695,000 CF
Office of all solds information	Health IT Roadmap Initiatives	\$1,875,500 CCF
Office of eHealth Information		\$4,729,500 CF
Natural Resources	Law Enforcement Record Management System	\$2,523,326 CF
Labor and Employment*	Unemployment Insurance Mainframe	\$9,750,000 CF
	Migration and Modernization	
Total CCF		\$17,537,760
Total CF		\$19,147,826

Source: Legislative Council Staff.

^{*}FY 2018-19 IT capital budget amendment.

The committee also recommend funding for six community college IT capital projects if additional funding was available.

After further deliberation by the JBC, the Department of Labor and Employment's appropriation was reduced to \$6,300,000 CF for the Unemployment Insurance Mainframe Migration and Modernization project. Overall, the FY 2017-18 Long Bill funded eight IT capital budget requests, including \$15,206,760 CCF and \$19,147,826 CF (including federal funds).

Supplemental IT Budget Requests

The JTC's charge gives the committee oversight responsibility for approving supplemental IT budget requests. The committee discussed three supplemental requests from the Department of Human Services and the Department of Personnel and Administration.

Table 2 provides more information about two approved supplemental IT capital budget requests for FY 2017-18 that were recommended by the JTC in 2018, including the agency making the request, project title, and the amount of federal funds (FF) requested.

Table 2
FY 2017-18 Supplemental IT Budget Requests Approved by the JTC

Department	Project Name	JTC FY 2017-18 Requested Appropriation
Human Services	Child Care Automated Tracking System Enhancement	\$786,500 FF
Human Services	Modernizing the Child Welfare Management System	\$2,472,849 FF
Total FF		\$3,259,349

Source: Legislative Council Staff.

Ultimately, the JBC also approved a supplemental request for HRWorks (\$2,888,529 CCF) in House Bill 18-1170.

Judicial Branch FY 2018-19 Budget Request

Pursuant to Joint Rule 45 (a)(3)(b), the JBC requested that the committee review a FY 2018-19 operating budget request from the Colorado Judicial Department. After consideration, the committee recommended approval of \$840,015 General Fund (GF) and 7.0 FTE for the Colorado Judicial Department's Department Priority #5: Project Management Office, Product Owner, and Information Security Staff. The committee stated in a letter to the JBC that it would continue to seek annual updates from the Judicial Branch on the implementation of the project management office.

SIPA Update

Representatives from SIPA presented SIPA's annual report to the committee. SIPA updated the committee on the Colorado State Web Portal (www.colorado.gov) and the authority's work with Colorado Interactive. Representatives also discussed the sevices that SIPA provides to state and local governments.

Office of the State Auditor Briefing

Representatives from the OSA presented OSA's *Annual Report of Audit Recommendations Not Fully Implemented*. They highlighted outstanding financial, performance, and IT audit recommendations. The committee discussed audit metrics, accountability for IT-specific recommendations, and OIT's plans to address the recommendations presented.

HRWorks Project Updates

In 2017 and 2018, the committee heard several presentations from OIT and the Department of Personnel and Administration regarding the status, management, and budget of the departments' HRWorks project. The HRWorks project plans to modernize statewide time and leave tracking, payroll processing, performance and personnel management, and the single-source statewide database for employee and position information.

OIT Project Oversight

OIT presented several IT project dashboard updates to the committee. The committee also received an update on OIT's five-year roadmaps. IT project dashboards are utilized to keep the committee updated about ongoing state IT projects. The committee discussed the best format for these project dashboards and received several updated versions of project dashboards from OIT at meetings throughout 2018.

Blockchain Technology

Representatives the National Cybersecurity Center in Colorado Springs presented an overview of blockchain technology to the committee. The committee discussed the risks of cybersecurity attacks in Colorado, blockchain technologies, and blockchain technology's potential use at the state level. In addition, the committee heard from several technical experts and blockchain technology vendors.

Cybersecurity Executive Session

The committee convened an executive session to hear a presentation regarding a cybersecurity incident from OIT and the Colorado Department of Transportation.

Interoperability Project Updates

Representatives of the Department of Human Services updated the committee on the progress of the department's interoperability project. The committee discussed with the representatives the scheduled delays related to the project, as well as the federal approval process associated with the project. The committee sent a letter to the federal Centers for Medicare and Medicaid Services communicating the committee's support for the project and requesting approval of the project at the earliest opportunity.

Colorado Benefits Management System Transformation Project

The committee received several updates from the Department of Human Services regarding the Colorado Benefits Management System (CBMS) Transformation project. The committee discussed with representatives from the department the transformation of CBMS to a cloud-based system, the project's IV&V report, the project schedule, stakeholder communication, and changes to the project timeline. In addition, representatives of several counties presented to the committee their perspectives on the future implementation of the project and the department's communication with stakeholders.

<u>Tour of the Colorado Cable Telecommunications Association's Broadband Experience Center</u>

The committee toured the Colorado Cable Telecommunications Association's Broadband Experience Center. The committee learned about broadband in Colorado and discussed barriers to investment in broadband infrastructure.

DRIVES Presentation

The committee met jointly with the Transportation Legislation Review Committee to hear a presentation from the Colorado Division of Motor Vehicles. Specifically, the committee heard an update on the implementation of the DRIVES project. The DRIVES project replaced the outdated Driver License System and Colorado State Titling and Registration System with a modern, web-based system. The committee discussed the issues currently faced during project implementation and the steps the division is undertaking to resolve those issues.

Modernizing the Child Welfare Case System (Trails) Project Updates

Representatives of the Department of Human Services updated the committee on the progress of the department's Modernizing the Child Welfare Case System (Trails) project. The Trails modernization project addressed the system's mobile device compatibility, data integration, interface navigation, implementation of system modifications, and profile-driven capabilities. The committee discussed with the representatives several user and system issues related to the final release of the project, as well as lessons learned.

Legislation

The committee met several times with representatives of OIT and the Government Advisory Data Board to discuss proposed legislation. As a result of committee discussion and deliberation, the committee recommended the following bill for consideration in the 2018 legislative session.

Senate Bill 18-209. The bill, which was passed the General Assembly and signed by the Governor, made changes to the Government Data Advisory Board. First, it modified the definition of "interdepartmental data protocol" to conform with current practice. It also changed the membership of the board so every Executive Branch agency is represented. Finally, it extended the repeal date for the board from July 1, 2019, to July 1, 2024. The education data subcommittee of the board will still repeal on July 1, 2019. Instead of a sunset review by the Department of Regulatory Agencies (DORA), the board will be reviewed by the JTC.

Resource Materials

Meeting summaries are prepared for each meeting of the committee and contain all handouts provided to the committee. The summaries of meetings and attachments are available at the Division of Archives, 1313 Sherman Street, Denver (303-866-2055). The listing below contains the dates of committee meetings and the topics discussed at those meetings. Meeting summaries are also available on our website at:

https://leg.colorado.gov/committees/joint-technology-committee

Meeting Date and Topics Discussed

January 12, 2018

- Outstanding audit recommendations, Office of the State Auditor
- Overview of supplemental requests
- Consideration of supplemental requests, Department of Human Services

January 19, 2018

- ◆ Overview of FY 2018-19 IT budget requests
- Colorado Commission on Higher Education prioritized budget requests
- Governor's Office of State Planning and Budgeting
- FY 2018-19 budget requests, Department of Human Services
- FY 2018-19 budget request, Colorado Parks and Wildlife
- FY 2018-19 budget request, Department of Education

January 26, 2018

- FY 2018-19 budget request, Governor's Office of eHealth Innovation
- FY 2018-19 budget request, Department of Public Health and Environment
- FY 2018-19 budget requests, Colorado Community College System
- FY 2018-19 budget request, Office of Information Technology
- Briefing on the Government Data Advisory Board
- Consideration of potential legislation and other business

February 2, 2018

- Presentation from OIT and the Department of Personnel & Administration
- Prioritization of FY 2018-19 IT budget requests

February 9, 2018

- Presentation from SIPA
- Prioritization of FY 2018-19 budget requests
- Potential legislation

February 23, 2018

- Overview of Senate Bill 18-086
- Presentation on blockchain from the National Cybersecurity Center
- Testimony on blockchain

March 9, 2018

• FY 2018-19 IT capital budget amendment request, Department of Labor and Employment

March 14, 2018

- Potential legislation
- ◆ FY 2018-19 Judicial Branch operating request

April 13, 2018

- OIT project dashboards
- Executive session: cybersecurity

July 24, 2018

- Update on the Colorado Benefits Management System project, OIT
- Update on the Interoperability project, OIT and Department of Human Services
- Update on HRWorks project, OIT and the Department of Personnel & Administration

August 23, 2018

- County perspectives on the Colorado Benefits Management System transformation
- Update on the Colorado Benefits Management Transformation project, OIT
- Discussion with counties and OIT

September 4, 2018

- Update on the IV&V report, Colorado Benefits Management System Transformation project, OIT
- Other business
- Tour of the Colorado Cable Telecommunications Association's Broadband Experience Center

October 1, 2018 (Joint Meeting with the Transportation Legislation Review Committee)

• Presentation from the Division of Motor Vehicles

December 13, 2018

- Update on HRWorks project, DPA and OIT
- Update on the Trails modernization project, DHS and OIT
- Presentation from Amazon Web Services